

DETAILED ACTION

1. The amendment submitted on 11/05/2009 has been acknowledged. Claims 10-26 and 28-33.

Claim Objections

2. Claim 10 is objected to because of the following informalities:

In lines 16, "if any of the at least one associated print attributes matches any *determined attributes*" should be changed to "if any of the at least one associated print attributes matches any **determined print attribute of interest**".

Also, in line 18, "the result of any object with an associated print attribute that matches any *determined attribute*" should be changed to "the result of any object with an associated print attribute that matches any **determined print attribute of interest**". Such changes are suggested in order to correct antecedent basis issue.

Appropriate correction is required.

Response to Arguments

3. Applicant's arguments with respect to claims 10-26 and 28-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-12 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackelen et al. (US Publication Number 2003/0053810 A1) and Suzuki et al. (US Patent Number 5,923,013) and further in view of Binder (US Publication Number 2004/0196494 A1).

(1) regarding claim 10:

As shown in figures 1-2, Jackelen et al. discloses a method for analyzing a print job comprising an object having an associated print attribute (**column 4, lines 1-3; note that a method of receiving a print job from a network and the print job header is parsed and the print job attributes are determined. Also, see column 2, lines 36-38; note that the print job is has individual page to be printed i.e. considered as an object**), the method comprising:

determining, by a computer, at least one print attribute of interest (**column 4, line 3; note that the attributes of the print job are determined. Also, see the attributes of interest being font, color and a like stated in column 2, lines 31-33**);

associating, by the computer, a corresponding unique marker with each determined attribute (**column 4, lines 4-7; note that the unique marker is considered**

as the resources and capabilities of the printer i.e. printer attributes as it is being associated with the print job attributes);

receiving, by the computer, page description language ("PDL") commands that describe the objects included in the print job (**column 2, lines 27-29; note that the print job is described in a PDL format. Also see column 4, line 1, the print job is received from the network i.e. in PDL format);**

interpreting, by the computer, the PDL commands to process each object in the print job and the at least one associated print attribute (**column 2, lines 30-31; note that the PDL format includes the job attributes that is in the page of the print job. Also, see that the objects i.e. page of the print job is a single page as explained in line 38);**

reporting, by the computer, any global printer setting and printer factors that affect the print job (**column 4, lines 4-7; note that a pre-job mismatch check, and inquires whether there is a mismatch between any of the print job attributes specified in the job header and the available printer resources and capabilities);**

determining, by the computer, if any of the at least one associated print attributes matches any determined the determined attributes (**column 4, lines 15-20; note that the an affirmative response is received on the inquires of each page i.e. object based on the match and mismatch existing in the attribute i.e. resources and capabilities of the printer); and**

reporting, by the computer, the results of any object with an associated print attribute that matches any determined attribute using the corresponding unique marker

(column 4, lines 20-23; note that if no mismatch is detected i.e. when the attributes and capabilities match, the page i.e. object is sent to the marking engine for printing); and

wherein reporting comprises any of printing a report and transmitting data for display on the computer **(column 4, lines 12-14; note that a pre-job mismatch state, places the print job on hold and displays a message indicating the existence and nature of the mismatch state on the printer user interface).**

Jackelen et al. disclose all of the subject matter as described as above except for specifically teaching a method implemented by a computer comprising a processor and a memory, the processor configured to implement instructions stored in the memory for analyzing a print job comprising a plurality of objects, each object comprising any of pages, text, images and graphics, each object having at least one associated print attribute.

However, Suzuki et al. teaches a method implemented by a computer **(column 4, lines 51-53; note that the host system is disclosed)** comprising a processor and a memory, the processor configured to implement instructions stored in the memory for analyzing a print job comprising a plurality of objects, each object comprising any of pages, text, images and graphics, each object having at least one associated print attribute **(abstract, lines 1-10, note that when a print job is interpreted, a job description file and page data for each page are created. The job description file contains the attribute of the entire job and a job element (content) list. An item of page data is associated with the print attribute of each page including image data.**

The job control module extracts necessary image data according to the job element list and sends it to a printer).

Jackelen et al. and Suzuki et al. are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have a method implemented by a computer comprising a processor and a memory, the processor configured to implement instructions stored in the memory for analyzing a print job comprising a plurality of objects, each object comprising any of pages, text, images and graphics, each object having at least one associated print attribute. The suggestion/motivation for doing so would have been in order to easily implement print job combination and page addition (abs. lines 9-12). Therefore, it would have been obvious to combine Jackelen et al. with Suzuki et al. to obtain the invention as specified in claim 10.

Jackelen et al. and Suzuki et al. disclosed most of the subject except for explicitly teaching reporting, by the computer, the results of any object with an associated print attribute that matches any determined attribute using the corresponding unique marker.

However, Bonder disclosed reporting, by the computer, the results of any object with an associated print attribute that matches any determined attribute using the corresponding unique marker **(paragraph [0018], lines 8-12; note that the decoder retrieves those formats from the format attribute data store having unique content markers and then compares the content marker(s) for each of the retrieved formats against the print data stream).**

Jackelen et al., Suzuki et al. and Bonder are combinable because they are from the same field of endeavor i.e. processing data for printers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to report, by the computer, the results of any object with an associated print attribute that matches any determined attribute using the corresponding unique marker. The suggestion/motivation for doing so would have been in order to analyze the print data stream with a predetermined data stream (paragraph [0006], lines 1-10). Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Bonder to obtain the invention as specified in claim 10.

(2) regarding claim 11:

Jackelen et al. further disclosed, the method of claim 10, wherein the PDL commands comprise PostScript commands (**column 2, lines 29-30; note that PostScript format is disclosed**).

(3) regarding claim 12:

Jackelen et al. further disclosed, the method of claim 10, wherein the PDL commands comprise printer control language (PCL) commands (**column 2, line 30; note that PCL format is disclosed**).

(4) regarding claim 28:

Jackelen et al. further disclosed, the method of claim 10, wherein the determined print attribute of interest comprises an orientation (**column 1, lines 38-40; note that the one of the attribute is the print media and the correct size and finishing i.e. orientation**).

(5) regarding claim 29:

Jackelen et al. further disclosed, the method of claim 10, wherein the unique marker comprises text (**column 4, lines 24-26; note that the unique marker is considered as the printer with the resources and capabilities and the printing is executed i.e. printing text is inherent**).

6. Claims 13-15 and 18-26 are rejected under 35 U.S.C 103(a) as being unpatentable over Jackelen et al. (US Publication Number 2003/0053810 A1) and Suzuki et al. (US Patent Number 5,923,013) as applied to claim 10 above, and further in view of Behlok (USPN 6,469,805 B1).

(1) regarding claim 13:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the object comprises text.

However, Behlok teaches wherein the object comprises text, an image and graphic (**column 5, lines 11-13; note that the PDL files includes images, text data and graphic data**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and field of endeavor i.e. data processing for printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the two references because PDL files includes different forms of data. The suggestion/motivation for doing so would have been in order to obtain a method that is versatile and flexible for processing a print job. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Behlok to obtain the invention as specified in claim 13.

(2) regarding claim 14:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the object comprises an image.

However, Behlok teaches wherein the object comprises text, an image and graphic (**column 5, lines 11-13; note that the PDL files includes images, text data and graphic data**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and field of endeavor i.e. data processing for printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine

the two references because PDL files includes different forms of data. The suggestion/motivation for doing so would have been in order to obtain a method that is versatile and flexible for processing a print job. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Behlok to obtain the invention as specified in claim 14.

(3) regarding claim 15:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the object comprises graphic.

However, Behlok teaches wherein the object comprises text, an image and graphic (**column 5, lines 11-13; note that the PDL files includes images, text data and graphic data**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and field of endeavor i.e. data processing for printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the two references because PDL files includes different forms of data. The suggestion/motivation for doing so would have been in order to obtain a method that is versatile and flexible for processing a print job. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Behlok to obtain the invention as specified in claim 15.

(4) regarding claim 18:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for wherein the determined print attribute of interest comprises a color space.

However, Behlok discloses wherein the determined print attribute of interest comprises a color space (**column 1, lines 30-36; note that color space is disclosed**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor i.e. data processing for printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art at to combine the two references because in digital color imaging, RGB and CMYK have the array of pixel information for each of the imaging colors. The suggestion/motivation for doing so would have been in order to acquire a versatile and flexible method when analyzing the color space. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 18.

(5) regarding claim 19:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for wherein the determined print attribute of interest comprises a red, green, blue color space.

However, Behlok discloses wherein the determined print attribute of interest comprises a red, green, blue color space (**column 1, lines 30-36; note that RGB is disclosed**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor i.e. data processing for printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the two references because in digital color imaging, RGB and CMYK have the array of pixel information for each of the imaging colors. The suggestion/motivation for doing so would have been in order to acquire a versatile and flexible method when analyzing the color space. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 19.

(6) regarding claim 20:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for wherein the determined print attribute of interest comprises a cyan, magenta, yellow color space.

However, Behlok discloses wherein the determined print attribute of interest comprises a cyan, magenta, yellow color space (**column 1, lines 30-36; note that CMYK is disclosed**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor i.e. data processing for printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art at to combine the two references because in digital color imaging, RGB and CMYK have the array of pixel information for each of the imaging colors. The suggestion/motivation for doing so would have been in order to acquire a versatile and flexible method when analyzing the color space. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 20.

(7) regarding claim 21:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for wherein the color space comprises a device-dependent color space.

However, Behlok discloses wherein the color space comprises a device-dependent color space (**column 1, lines 44-48; column 1, lines 50-55; note that typically the half toner renders a raster image for the print colors**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art at wherein the color space comprises a device-dependent color space. The suggestion/motivation for doing so would have been would have been in order to efficiently process the color space so that the print quality

would be enhanced. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claims 21.

(8) regarding claim 22:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for wherein the color space comprises a device-independent color space.

However, Behlok discloses wherein the color space comprises a device-independent color space (**column 1, lines 44-48; column 1, lines 50-55; note that typically the half toner renders a raster image for the print colors, however a multidimensional look-up table is commonly used before the printer received the color values**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the color space comprises a device-independent color space. The suggestion/motivation for doing so would have been in order to efficiently process the color so that the print quality would be enhanced. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 22.

(9) regarding claim 23:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the determined print attribute of interest comprises a color value.

However, Behlok discloses a method wherein the determined print attribute of interest comprises a color value (**column 1, lines 30-36; note that the different color space is disclosed**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art at to combine the two references because in digital color imaging, RGB and CMYK have the array of pixel information for each of the imaging colors. The suggestion/motivation for doing so would have been that is versatile and efficient. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 23.

(10) regarding claim 24:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the determined print attribute of interest comprises a red, green, blue color value.

However, Behlok discloses a method wherein the determined print attribute of interest comprises a red, green, blue color value (**column 1, lines 30-36; note that the different color space is disclosed**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art at to combine the two references because in digital color imaging, RGB and CMYK have the array of pixel information for each of the imaging colors. The suggestion/motivation for doing so would have been in order to acquire a versatile and flexible method when analyzing the color space. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 24.

(11) regarding claim 25:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the determined print attribute of interest comprises a color value, a red, green, blue color value, a cyan, magenta, yellow color value.

However, Behlok discloses a method wherein the determined print attribute of interest comprises a color value, a red, green, blue color value and a cyan, magenta, yellow color value (**column 1, lines 30-36; note that the different color space is disclosed**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art at to combine the two references because in digital color imaging, RGB and CMYK have the array of pixel information for each of the imaging colors. The suggestion/motivation for doing so would have been in order to acquire a versatile and flexible method when analyzing the color space. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 25.

(12) regarding claim 26:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the color value comprises a spot color value.

However, Behlok discloses a method wherein the color value comprises a spot color value (**column 7, lines 40-44; note that pantone spot color is considered as the ink dot of a particular process color on a sheet of paper**).

Jackelen et al., Suzuki et al. and Behlok are combinable because they are from the same class and filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the color value comprises a spot color value because when analyzing an ink dot of a particular process color on a sheet of paper is a derivation of a spot color value. The suggestion/motivation for doing so would have been in order to acquire a versatile and flexible method when analyzing the

color space. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. and Behlok to obtain the invention as specified in claim 26.

7. Claims 16 and 17 are rejected under 35 U.S.C 103(a) as being unpatentable over Jackelen et al. (US Publication Number 2003/0053810 A1) and Suzuki et al. (US Patent Number 5,923,013) as applied to claim 10 above, and further in view of Tai (USPN 5,606,649).

(1) regarding claim 16:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the determined print attribute of interest comprises a font name.

However, Tai disclose wherein the determined print attribute of interest comprises a font name (**column 5, lines 6-14; note that each PDL data includes font related data i.e. font type**).

Jackelen et al., Suzuki et al. and Tai are combinable because they are from they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the determined print attribute of interest comprises a font name. The suggestion/motivation for doing so would have been that it is efficient enough in order to permit accurate reconstruction of the original document even though the text characters would have different sizes and fonts (column

5, lines 15-17). Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Tai to obtain the invention as specified in claim 16.

(2) regarding claim 17:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the determined print attribute of interest comprises a font size.

However, Tai disclose wherein the determined print attribute of interest comprises a font size (**column 5, lines 6-14; note that each PDL data includes font related data i.e. font size**).

Jackelen et al., Suzuki et al. and Tai are combinable because they are from they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the determined print attribute of interest comprises a font size. The suggestion/motivation for doing so would have been that it is efficient enough in order to permit accurate reconstruction of the original document even though the text characters would have different sizes and fonts (column 5, lines 15-17). Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Tai to obtain the invention as specified in claim 17.

8. Claims 30-33 are rejected under 35 U.S.C 103(a) as being unpatentable over Jackelen et al. (US Publication Number 2003/0053810 A1) and Suzuki et al. (US Patent Number 5,923,013) as applied to claim 10 above, and further in view of Hirumi (USPN 6,059,469).

(1) regarding claim 30:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the unique marker comprises sound.

However, Hirumi teaches wherein the unique marker comprises sound (**column 13, lines 32-38; note that a buzzer is comprised in the printing device**).

Jackelen et al., Suzuki et al. and Hirumi combinable because they are from the same filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to wherein the unique marker comprises sound. The suggestion/motivation for doing so would have been in order to efficiently inform user. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Hirumi to obtain the invention as specified in claim 30.

(2) regarding claim 31:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein the unique marker comprises changing, by the computer, the color of the matched object.

However, Hirumi teaches wherein the unique marker comprises changing, by the computer, the color of the matched object (**column 1, lines 50-55; note that the color is changed to balance the density of the printed character**).

Jackelen et al., Suzuki et al. and Hirumi combinable because they are from the same filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the unique marker comprises changing the color of the matched object. The suggestion/motivation for doing so would have been that it is reliable to have a sound and color method when there is mismatch object in printing. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Hirumi to obtain the invention as specified in claim 31.

(3) regarding claim 32:

Jackelen et al. and Suzuki et al. disclose all of the subject matter as described as above except for teaching wherein reporting comprises displaying, by a computer, the matched object on a display device in the changed color.

However, Hirumi teaches wherein reporting comprises displaying, by the computer, the matched object on a display device in the changed color (**column 13, lines 35-36; note that a display LCD is disclosed**).

Jackelen et al., Suzuki et al. and Hirumi combinable because they are from the same filed of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein reporting comprises displaying the matched

object on a display device in the changed color. The suggestion/motivation for doing so would have been in order to obtain a reliable and visual assessment of the print job. Therefore, it would have been obvious to combine Jackelen et al., Suzuki et al. with Hirumi to obtain the invention as specified in claim 32.

(4) regarding claim 33:

Jackelen et al. further disclose, the method of claim 31, wherein reporting, by the computer, comprises printing the matched object in the changed color (**column 4, lines 23-26; note that the matched print job is printed**).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pari-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hilina S Kassa/
Examiner, Art Unit 2625
January 07, 2010
/David K Moore/

Supervisory Patent Examiner, Art Unit 2625

